

Remarks

Examiner in his office action dated June 15, 2005 rejected claims 1-32. Applicant amended independent claims 1 and 32 to more particularly point out the differences between the claimed invention and prior arts relied upon by Examiner.

Priority

Examiner rejected Applicant's claim for priority benefit of US Provisional Application 60/242,614, filed on Oct. 23, 2000. Examiner then rejected claims 2-7, 11, 15-16, and 21 according US Provisional Application 60/124,839, which was NOT the provisional application from which Applicant claimed benefit. Therefore, Applicant respectfully submit that all priority claim rejections were based an erroneous Provisional Application and therefore should be withdrawn.

If, however, the use of US Provisional Application 60/124,839 was only a clerical mistake, and the rejections were actually based on US Provisional Application 60/242,614, Applicant would like to point out the following:

Paragraph 2.2 regarding claims 2-7: the provisional application refers to a mobile vehicle "operated in a large planar or 3 dimensional area, as appropriate to the mobile vehicle" (p. 2, line 8). Claims 5 and 6 of the provisional application correspondingly refer to two and three degrees of freedom respectively—what would be the major translation motions of the vehicle in (1) flat pavement or (2) hilly pavements or in the air, as with an aircraft.

However, anyone skilled in the art of land and air vehicles knows that any such vehicle necessarily rotate in roll, pitch and yaw as well as translate, in reality making six degrees of freedom when rotation is considered. While the provisional application used the layman's idea that motion on flat land is two dimensional and on hills or in the air is three dimensional, this description cannot alter a physical reality that any vehicle necessarily operate in six degrees of freedom. In other words, the fact that Applicant claimed less than what physics inherently allows in the provisional application should not be used to deny Applicant the right to claim what physics inherently allows—operation with six degrees of freedom—in the non-provisional application.

Paragraph 2.3 regarding claims 11. The Provisional Application on page 3, line 8 specifically refers to a composite of a color video signal of the actual environment and computer generated elements presented on the driver's display.

Paragraph 2.4 : For claim 15, the Provisional Application on page 3, line 19 states that "[t]he scene generator 14 alters the virtual environment view....in response to the operator's actuation." For Claim 16, please find support in Provisional Application page 4 lines 20-23 and step c of claim 12.

Paragraph 2.5 regarding claim 21: the Provisional Application on page 3, lines 27-29, and again in claim 10, refers to parameter-constraining apparatus.

Drawing

The Examiner's comment that the informal drawings are for examination purpose only is duly noted. Applicant will submit formal drawings when the application is allowed.

102 Rejections

Claims 1-2, 4-5, 7-10, 12-15, 17-32 were rejected as being anticipated by Beskenis et al, "Integrated Display System for Low Visibility Landing and Surface Operations" ("Beskenis").

Beskenis is about improving visibility in landing and surface operations. The mathematical model in Beskenis picks up virtual reality database of fixed terrain as seen from that location and perspective. Accordingly, any hazard image superposed on the real image in Beskenis ONLY represent an object that is at that moment actually present in the outside environment (refer to Paragraph 2, page 1 of Beskenis, for example).

While the display in Beskenis mimics objects present in the current real environment, this invention adds virtual object(s) which is NOT present in the natural, outside environment (refer to paragraphs 008, 024, and 025 of the application, for example). Four letters of support, marked as Exhibit I, Exhibit II, Exhibit III, and Exhibit IV, are attached to this response documenting views from four experts in the field. In particular, Dr. Papelis of Exhibit I is the Chief Technical

Officer of National Advanced Driving Simulator ("NADS") and is considered the leading authority in this area of technology.

This difference forms the basis of the amendments made to independent claims 1 and 23. As amended, Beskenis does not anticipate claims 1 nor claim 23, both of which comprise "an environment view being presented on said scene display which is created at least in part by said scene generator by including an artificially generated object not currently present in the natural environment but aligned with the natural environment so as to give a perception of being fixed or moving normally in the natural environment." Because Beskenis does not anticipate either of the independent claims, Beskenis cannot anticipate any of the claims which depend from claims 1 and 23. Therefore, Applicant respectfully request that the 102 rejections be withdrawn.

103 Rejections

Examiner rejected claims 3, 6, and 16 as being unpatentable over Beskenis in view of U.S. Patent No. 6,474,159 by Foxlin et al ("Foxlin"). Because, as stated above, that Beskenis does not teach "an environment view being presented on said scene display which is created at least in part by said scene generator by including an artificially generated object not currently present in the natural environment but aligned with the natural environment so as to give a perception of being fixed or moving normally in the natural environment," and nor is this deficiency made up by any teaching in Foxlin, Applicant respectfully request that the 103 rejections be withdrawn.

Examiner rejected claim 11 as being unpatentable over Beskenis in view of Barham et al, "The Development of a Driver Vision Support System Using Far Infrared Technology: Progress to Date on the DARWIN Project." ("Barham"). Because, as stated above, that Beskenis does not teach "an environment view being presented on said scene display which is created at least in part by said scene generator by including an artificially generated object not currently present in the natural environment but aligned with the natural environment so as to give a perception of being fixed or moving normally in the natural environment," and nor is this deficiency made up by any teaching in Barham, Applicant respectfully request that the 103 rejection to claim 11 be withdrawn.

Applicant respectfully submit that the rejections and objections in the Office Action dated June 15, 2005 have been overcome and the application is now in condition for allowance. The Examiner is invited to call the undersigned at 408-776-8719 if there remains any issue with allowance of this case.

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Respectfully submitted,

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